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10/715,306	11/17/2003	Jaime Alberto Torrez	BUS-026079 CON	5115

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EXAMINER	
TANG, SON M	

ART UNIT	PAPER NUMBER
2632	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/715,306	Applicant(s) TORREZ ET AL.	
	Examiner Son M. Tang	Art Unit 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *40-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *40-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims **40-45, 46-52, 55-57** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1-38** of U.S. Patent No. **6,696,969**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitation of claim 40, "a fuse configured to open upon an occurrence of a predetermined current condition", it is obvious in skill of the art that open fuse indication device uses for indicating electrical circuit interrupted, which causes by shortage or overload current, which means over predetermined current, further more, new claims are written in a simply form, that reduces words. It is obvious of one having ordinary skill in the art would find that, reducing words in the claims would make claims broader.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim **56 is** rejected under 35 U.S.C. 103(a) as being unpatentable over **Douglass** [US 5,841,337] in view of **Greenberg** [US 4,499,447].

Regarding to claim 56: Douglass discloses a pull out fuse disconnect switch assembly [Fig. 3-5] comprising:

-a pull out fuse [100] comprising a pull out housing 100, and a primary fuse element 154, said pull out housing removable and insert able into said receptacle 102 [Fig. 7, col. 4, lines 37-67];

-a switch housing assembly [102] for receiving said pull out fuse assembly, housing comprising first and second contact assemblies [126] establishing an electrical connection through said fuse when fuse is received in said receptacle, [see Fig. 5];

-pull out open circuit indication device 104, which can be removable from the receptacle housing 102, Douglass does not specifically disclose that indication device connected to said primary fuse element, Greenberg teaches fuse with integrity indicator comprises an open fuse indication device 27 connected in parallel with said fuse 35 [see Fig. 4-5]. It would have been obvious of one having ordinary skilled in the art to modify the electrical indicator as taught by Greenberg, into the pull out fuse of Douglass for the advantage of better identify the indication via an illumination of LED and provides brighter indicator.

4. Claims **40, 42, 46, 48-50 and 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Douglass** in view of **Greenberg**, and further in view of **Happ et al**. [US 5,559,662].

Regarding to claims 40: Douglass discloses a pull out fuse disconnect switch assembly [Fig. 3-5] comprising:

-a pull out fuse [100] configured to open an electrical circuit of interruption mechanism 156 upon an occurrence predetermined current condition such as overload current [col. 4, lines 37-67];

-a switch housing assembly [102] for receiving said pull out fuse assembly, housing comprising first and second contact assemblies [126] establishing an electrical connection through said fuse when fuse is received in said receptacle, [see Fig. 5];

-an open fuse indication device 104, which can be removable from the receptacle housing 102, Douglass does not specifically disclose that, fuse indication device mechanically and electrically connected in parallel with said fuse. Greenberg teaches fuse with integrity indicator comprises an open fuse indication device 27 connected in parallel with said fuse 35 [see Fig. 4-5]. It would have been obvious of one having ordinary skilled in the art to modify the electrical indicator as taught by Greenberg, into the pull out fuse of Douglass for the advantage of better identify the indicator via an illumination of LED.

Douglass does not specifically disclose that an alarm terminal output in communication with said fuse indication device. Happ et al. teach a fused disconnect switch comprises an open fuse indication device LED 48, which electrically parallel connected with fuse 14 [see Fig. 3 and

4, col. 4, lines 53-67 to col. 5, lines 1-6] and an alarm terminal output 50 in communication with said open fuse indication device 48 is completely inserted into said receptacle [see Fig. 3, col. 5, lines 17-24]. It would have been obvious to one having ordinary skill in the art at the time the claimed invention, to implement the alarm terminal output as suggested by Happ et al. in the system of Douglass, in doing that the fuse alarm output can be easily monitored at a remote location.

Regarding to claims 42 and 48: Douglass further discloses wherein one of said first and second contact assemblies comprises a box contact assembly [110], said fuse line side conducting portion and said fuse load side conducting portion comprises a terminal blade [118], a bottom and terminal openings [120] and the assemblies comprises fuse clips [126] as shown in Fig. 5.

Regarding to claims 49 and 52: Douglass and Happ et al. disclose all the limitation as described in claim 1 above, however, Happ et al. further teach that wherein said open fuse indication device comprises a high resistance [56] electronic circuit [Fig. 4, col. 5, lines 2-7].

Regarding to claim 50: Douglass further discloses a DIN rail latch [116] [see Fig. 5].

Regarding to claim 46: Douglass discloses a pull out fuse disconnect switch assembly [Fig. 3-5] comprising:

-a pull out fuse [100] configured to open an electrical circuit of interruption mechanism 156 upon an occurrence predetermined current condition such as overload current [col. 4, lines 37-67];

-a switch housing assembly [102] for receiving said pull out fuse assembly, housing comprising first and second contact assemblies [126] establishing an electrical connection through said fuse when fuse is received in said receptacle, [see Fig. 5].

Douglass does not specifically disclose wherein the first terminal contact assembly establishing a line side electrical connection and a second terminal contact assembly in establishing a load side electrical connection. Since, fuse is widely used, as over current protection device, thus it is obvious to one having ordinary skill in the art that in order to detect input current from the electrical source, the first terminal and second terminal of the fuse are connected between the line side and load side of an electrical source.

-an open fuse indication device 104, which can be removable from the receptacle housing 102, Douglass does not specifically disclose that, fuse indication device mechanically and electrically connected in parallel with said fuse. Greenberg teaches fuse with integrity indicator comprises an open fuse indication device 27 connected in parallel with said fuse 35 [see Fig. 4-5]. It would have been obvious of one having ordinary skilled in the art to modify the electrical indicator as taught by Greenberg, into the pull out fuse of Douglass for the advantage of better identify the indicator via an illumination of LED.

Douglass does not specifically disclose that an alarm terminal output in communication with said fuse indication device. Happ et al. teach a fused disconnect switch comprises an open fuse indication device LED 48, which electrically parallel connected with fuse 14 [see Fig. 3 and 4, col. 4, lines 53-67 to col. 5, lines 1-6] and an alarm terminal output 50 in communication with said open fuse indication device 48 is completely inserted into said receptacle [see Fig. 3, col. 5, lines 17-24]. It would have been obvious to one having ordinary skill in the art at the time the

claimed invention, to implement the alarm terminal output as suggested by Happ et al. in the system of Douglass, in doing that the fuse alarm output can be easily monitored at a remote location.

5. Claims **53, 55 and 57** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Douglass** in view of **Greenberg**, and further in view of **Middlehurst et al**. [US 6,317,311].

Regarding to claim 53: Douglass discloses a pull out fuse disconnect switch assembly comprising:

-a pull out assembly comprising a housing [100], a fuse element [154, 156] within said housing extending between a two blades [118] and an open fuse indication device [104] configured to visually indicate a state of said fuse element,

-a switch housing assembly comprising a housing defining a fuse receptacle [102] for receiving said pull out fuse assembly, except specifically stating that, fuse element extending between a line side conducting portion and load side conducting portion, since it is known in the art that, fuse switch uses for monitoring input current from line side into load line, thus, one having ordinary skill in the art would found it obvious to connect the fuse switch between a line side conducting and a load side conducting, in order to monitor the input current from the source into the load.

Douglass fails to disclose that the fuse indication device connected between a line side and load side conductors. Greenberg teaches a fuse with integrity indicator comprises an open fuse indication device 27 connected in parallel with said fuse 35 [see Fig. 4-5], wherein the fuse and indication device are extending between the line side and load side conducting portions. It

would have been obvious of one having ordinary skilled in the art to modify the electrical indicator as taught by Greenberg, into the pull out fuse of Douglass for the advantage of better identify the indication via an illumination of LED which provides brighter indicator.

Douglass discloses a first terminal contact 126, except for specifically comprising a bullet contact, bullet contact is a known type of nut crew uses for holding, fastening or securing object, Middlehurst et al. teach a circuit breaker mounting system which using a bullet contact assembly for connecting the circuit breaker to external circuitry [as shown in Fig. 1 and 4]. One having ordinary skill in the art would found it obvious to use a bullet contact assembly, for the advantage of convenience and assembly tool is not require, since bullet contact assembly is a thumb-crew.

Regarding to claims 55 and 57: Douglass discloses a pull out fuse disconnect switch assembly [Fig. 3-5] comprising:

-a pull out fuse [100] comprising a pair of opposed conductive elements 118 and a fuse element [154, 156] extending between the opposed conductive elements 118 [see Fig. 7]; and

-a switch housing assembly [102] for receiving said pull out fuse assembly, and a pair of switchable terminal contacts [126] therein for engaging said pair of conductive elements 118 [see Fig. 5], Douglass fails to disclose that the fuse indication device connected in parallel with the fuse element and between a line side and load side conductors. Greenberg teaches a fuse with integrity indicator comprises an open fuse indication device 27 connected in parallel with said fuse 35 [see Fig. 4-5], and wherein the fuse and indication device are extending between the line side and load side conducting portions. It would have been obvious of one having ordinary skilled in the art to modify the electrical indicator as taught by Greenberg, into the pull out fuse

of Douglass for the advantage of better identify the indication via an illumination of LED which provides brighter indicator.

Douglass fails to specify that, wherein at least one of said terminal contacts comprises a bullet contact assembly, since bullet contact is a known type of fastening device in the art.

Middlehurst et al. teach a circuit breaker mounting system, which uses bullet contact assembly for connecting a circuit breaker to an external circuitry [as shown in Fig. 1 and 4]. It would have been obvious to one having ordinary skill in the art, to use a bullet contact assembly, for the advantage of convenience and less require of assembly tool such as screwdriver or wrench, since bullet contact assembly is a thumb-crew contact.

6. Claims **41, 43-44, 47, 49, 51 and 54** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Douglass ,Greenberg** in view of **Happ**, and further in view of **Middlehurst et al**. [US 6,317,311].

Regarding to claims 41, 43-44: Douglass, Greenberg and Happ. disclosed all the limitation in claim 1 above, Douglass also disclose a boss [112] to secure the fuse holder to the surface, they are not specifically show any structure components associated with the fuse such as a bullet contact, terminal stud and common bus bar. However, Middlehurst et al. teach a circuit breaker mounting system which uses to mount multiple circuit breaker on the bar that comprising, a bullet contact [36] in Fig. 1, a terminal stud [46, 68] [Fig. 2] and a L-shape common bus bar (84), which is shaped as an anti-rotation [Fig. 27, 30 and col. 6, lines 1-18]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ all the features show above as suggested by Middlehurst et al. into the

references combination above for the advantage of convenience and easy to connect/disconnect electrical wires from the fuse terminal.

Regarding to claims 47, 49 and 51: Refer to the consideration of claims **41 and 43-44 above**.

Regarding to claim 54: Douglass, Greenberg, Happ and Middlehurst et al. disclose all the limitation as described above, Happ further teaches that an alarm terminal output 50 [as shown in Fig. 1, 3].

Response to Arguments

7. Applicant's arguments, filed 1/18/05, with respect to the rejection(s)of claim(s) 40-57 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Greenberg [US 4,499,447].

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hull et al. [US 5,701,118].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M. Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang

DANIEL WU
SUPERVISORY PATENT EXAMINER
7/11/05